

## End Stage Renal Disease in Diabetic Patients with Critical Limb Ischemia

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Introduction: End stage renal disease (ESRD) is a chronic complication of diabetes, and diabetes is today the most frequent disease requiring dialytic treatment. Patients with ESRD are more prone to develop peripheral vascular disease (PVD) and ischemic foot lesionis. Diabetic foot lesions remain an important cause of morbidity in patients with ESDR in dialysis. Vascular disease is multifocal in diabetic patients that are four times more likely than the general population to develop PVD and even more in presence of end stage renal disease. Actually, foot complications are twofold frequency in diabetic patients with ESRD. Percutaneous Transluminal Angioplasty (PTA) is our treatment of choice for diabetic subjects with critical limb ischemia (CLI). Aim: To detect whether outcomes in diabetic patients with CLI treated with PTA are different between diabetic patients with ESRD in dialysis (dia+) and those without such complication (dia-). Materials and Methods: We included 387 diabetic patients (M / F: 241/146) with CLI treated by PTA divided in two groups according to the presence of ESRD and dialysis treatment. At follow-up we recorded the following outcomes: healing (A), major amputation(B), death (C) and survival with both legs without healing of the lesions (D).

Results: At follow-up (18.2 ± 14.7 months) we recorded the following outcomes (p = 0.019):

Total (n 487): 60.6% (A), 14.2% (B), 16% (C), 9.1% (D);

dia - (n 436): 63.7% (A), 13.1% (B), 14.5% (C), 8.7% (D);

dia + (n 51): 31.3% (A), 21.5% (B), 25.4% (C), 21.5% (D);

Conclusion: Our study shows that diabetic patients with ESRD in dialysis and CLI treated by PTA have a significantly worse prognosis in comparison with those without ESRD. However although the presence of ESRD is a strong negative prognostic index on outcomes in diabetic patients with CLI, PTA treatment allows the surviving of the affected leg in more than 50% of the cases also in the diabetic patients with ESRD and CLI and therefore this treatment is recommended also in diabetic patients with ESRD and CLI.